

THE MINISTRY OF HEALTH PROTECTION OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Department of infectious diseases with a course of dermatovenereology

APPROVED
vice-rector for scientific and pedagogical work.
Eduard BURIACHKIVSKYI
« 02 » / 09 / 20 25 p.



METHODOLOGICAL RECOMMENDATIONS

FOR PRACTICAL CLASSES

IN THE ACADEMIC DISCIPLINE

ACADEMIC DISCIPLINE

Infectious diseases
5 year

Level of higher education: second (master's)

Field of knowledge: 22 "Health care"

Specialty: 222 "Medicine"

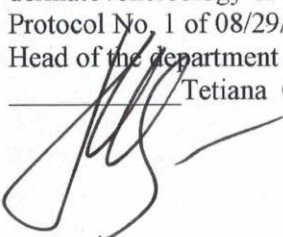
Educational and professional program: Medicine

Approved:

Meeting of the department of infectious diseases with a course of
dermatovenereology of Odessa National Medical University

Protocol No. 1 of 08/29/2025

Head of the department of infectious diseases with a course of dermatovenereology


Tetiana CHABAN

Teacher(s)

Chaban T.V. PhD. Doctor of Sciences, professor, head of the department.

Associate professors: candidate of medical science Pavlenko O.V., Gerasymenko

O.A., N.V. Movlyanova, K.M. Usychenko

Assistants: Verba N.V, Bocharov V.M.

Practical class No. 1

Subject: "Introduction to the course of infectology. General characteristics of infectious diseases with fecal-oral transmission mechanism" - 2 hours

Goal:

To improve the knowledge of students regarding: "infection", "infectious process", "infectious disease", features of infectious diseases, their classification, principles of diagnosis, treatment and prevention; characteristics of infectious diseases with fecal-oral transmission mechanism, etiology, epidemiology, pathogenesis, clinical manifestations; to form a professional skill in drawing up a plan for examining a patient for infectious diseases with a fecal-oral transmission mechanism, a comprehensive plan for the patient's treatment and necessary preventive measures.

Basic concepts:

Infectious disease, infectious process, pathogen source, fecal-oral mechanism of transmission

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge a student should know the answers to the questions.

- Concepts of "infection", "infectious process", "infectious disease".
 - Mechanisms of transmission of pathogens of infectious diseases.
 - Classification of infectious diseases.
 - Age characteristics of the course of infectious diseases
 - Indications for hospitalization of infectious patients.
 - Carrier state categories, antiepidemic measures for carriers.
 - Principles of diagnosis of infectious diseases. Features of the formation of an immune response after an infectious disease. Features of the formation of post-vaccination immunity.
 - The concept of specific prevention of infectious diseases. Vaccination.
 - The concept of "calendar of preventive vaccinations". The concept of "recommended vaccinations". Vaccination according to epidemic indications. Vaccination of risk groups.
 - Non-specific and specific methods of laboratory examination.
 - Principles of treatment of infectious diseases. Etiotropic, symptomatic and pathogenetic therapy.
 - General characteristics of infectious diseases with fecal-oral transmission mechanism
 - Epidemiological features of intestinal infectious diseases with fecal-oral transmission mechanism.
 - Leading clinical symptoms and syndromes in patients with intestinal infections.
 - Modern methods of laboratory diagnostics of infectious diseases with fecal-oral transmission mechanism.
 - Indications for hospitalization and rules for discharge of patients for infectious diseases with fecal-oral transmission mechanism
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, anamnesis of life and diseases, epidemiological anamnesis of the patient of infectious diseases with fecal-oral transmission mechanism;
- make physical examination of a patient with infectious diseases with a fecal-oral transmission mechanism and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with infectious diseases with a fecal-oral transmission mechanism and analyze the results obtained;
- substantiate the clinical diagnosis of a patient with infectious diseases with a fecal-oral transmission mechanism and carry out differential diagnosis with diseases with diarrhea syndrome;
- determine the tactics of providing emergency medical care in emergency situations (infectious-toxic shock, dehydration shock, intestinal bleeding, intestinal perforation) in a patient with infectious diseases with a fecal-oral transmission mechanism;
- to create a comprehensive treatment plan for a patient with an infectious disease diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine preventive measures of infectious diseases with fecal-oral transmission mechanism;
- draw up the medical documentation of a patient with an infectious disease with a fecal-oral transmission mechanism;
- make a report on the results of the examination of patients with infectious diseases with the fecal-oral mechanism of transmission by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the lesson

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaeztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class #2

Subject: "Typhoid fever. Paratyphoid A and B» - 2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of typhoid fever, paratyphoid A and B; to develop professional skills in drawing up an examination plan for a patient with typhoid fever and paratyphoid A and B (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts:

Typhoid fever, paratyphoid A, paratyphoid B.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge a student should know the answers to the following questions:
 - Etiology and epidemiology of typhoid fever, paratyphoid A and B.
 - Pathogenesis of typhoid fever, paratyphoid A to B
 - Stages of typhoid fever pathogenesis.
 - Morphological changes in the wall of the small intestine depending on the duration of the disease.
 - Stages of the cyclic clinical course of typhoid fever.
 - The main symptoms of typhoid fever in the initial period of the disease.
 - Key symptoms of typhoid fever in the clinax period of the disease.
 - Types of temperature patterns in typhoid fever.
 - Peculiarities of the clinical course of paratyphoid A and B.
 - Specific complications of typhoid fever.
 - Pathogenesis, clinical manifestations of perforation of the small intestine in typhoid fever, timing of occurrence
 - Pathogenesis, clinical manifestations of intestinal bleeding in typhoid fever, timing of occurrence.
 - Plan of examination of a typhoid patient and paratyphoid A and B.
 - Methods of specific diagnosis of typhoid fever. Interpretation of the results depending on the term of the disease and the material for the examination.
 - Etiotropic therapy of typhoid fever, paratyphoid A and B.: doses, route of administration, duration of treatment.
 - Principles of pathogenetic therapy of typhoid fever and paratyphoid A and B.
 - Treatment of typhoid fever complications.
 - Rules for discharge of convalescents from a hospital.
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, anamnesis of life and illness, epidemiological anamnesis of typhoid and paratyphoid patients;
- make a physical examination of a patient with typhoid fever and paratyphoid and determine the main symptoms of the disease;
- prescribe a set of laboratory and instrumental tests for a patient with typhoid fever and paratyphoid and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with typhoid fever and paratyphoid;
- determine the tactics of providing emergency medical care in case of emergency conditions in a patient with typhoid fever and paratyphoid;
- create a comprehensive treatment plan for a patient with typhoid fever and paratyphoid on the basis of a previous clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine measures to prevent typhoid fever and paratyphoid;
- draw up the medical documentation of a typhoid and paratyphoid patient;
- make a report on the results of the examination of a patient with typhoid fever and paratyphoid by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the lesson
Clinical case 1

A 32-year-old patient turned to the family doctor on the 5th day of the illness with complaints of a severe headache, general weakness, lack of appetite, insomnia, an increase in body temperature from 37.5 °C on the first day of the illness with a gradual increase to 39.0 °C in day of application for medical assistance. On examination: significant pallor of the skin, no rash. The tongue is coated with a grayish-white plaque, there are teeth marks on the lateral surfaces, which are free from plaque. Pulse 78/min., blood pressure 110/60. The abdomen is moderately bloated, painless. Liver for 1.5-2 cm protrudes from under the edge of the costal arch. Padalka's symptom is positive. Constipation for 2 days.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 2

A 45-year-old man fell ill 2 weeks after returning from Afghanistan, where he had malaria six months ago. On return, body lice were found. A severe headache, weakness, sudden increasing of temperature up to 39 °C appeared. The temperature temporary decreased on the 4th day of the illness, then the general intoxication, headache increased significantly, and a diffuse polymorphic rash appeared on the body. On the 7th day - the condition is severe, excitement, periodically - hallucinations. On the trunk - plenty erythematous-petechial exanthema. T - 40.1 °C, pulse 136 in 1 min, blood pressure 120/70 mm Hg. Moderately enlarged liver and spleen. Paradoxical ischuria. In the general blood analysis, moderate neutrophilic leukocytosis, aneosinophilia, accelerated ESR.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 3

A 22-year-old student returned from a natural disaster area in Zakarpattia a week before his illness (floods damaged his parents' house, flooded the estate). The disease began with general weakness, an increase in body temperature to 37.8, and decreased appetite. In the first days of the disease, he noticed rumbling in the stomach, loose stools that resembled pea soup, up to 3 times a

day, in the following days, the diarrhea changed to constipation. By the end of the first week of the disease, the condition significantly worsened due to general intoxication, the temperature reached 39.0 °C, with daily fluctuations within 1 degree, headache increased, sleep worsened. Objectively: the day of illness is the 8th. The skin is pale, there are single roseolae on the lateral surfaces of the abdomen. Pulse 80/min. Enlarged liver, spleen.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 4

An 18-year-old patient was brought to the hospital from the street, where he fainted. He does not have permanent housing, he spends the night at the railway station. In the last 2-3 weeks, he felt bad: he had a bad headache, he noted pronounced general weakness, lack of appetite. He did not measure the temperature, but it is assumed to increase. On the day of hospitalization, abdominal pain appeared without clear localization, there was no nausea, vomiting, general weakness increased. During examination: the patient answers questions sluggishly, skin is pale, body temperature 38.0°C. BP 90/60, pulse 110/min. The abdomen is bloated, moderately painful, mainly in the right iliac region, does not participate in the act of breathing; tension of the abdominal muscles was detected by palpation. On the skin of the abdomen - a pale pink roseolae rash, rash elements - no more than 10. The liver and spleen are enlarged.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 5

A 36-year-old patient has been sick for about 3 weeks: a gradual increase in temperature, which has taken on a wave-like character since the 2nd week of the illness, decreased work capacity, headache, insomnia. He was treated on an outpatient basis with a diagnosis of acute respiratory infection, and in the absence of an effect, he was referred to a hospital. During the admission: patient is adynamic, answers questions sluggishly. Skin is pale. Temperature 40°C. "Fuliginous" tongue. Flatulence. Positive symptom of Padalka. The liver protrudes 2-3 cm from the edge of the costal arch. The lower pole of the spleen is palpated. 2 days after hospitalization, dizziness, tinnitus, cold sweat on the face, melena appeared. Blood pressure 70/40, pulse 120/min., temperature decreased to normal.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 28-44
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 537-543.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd

edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.

3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 3

Topic: Diarrheal syndrome in the clinic of infectious diseases. Cholera 2 hours

Goal:

Improve students' knowledge of: etiology, pathogenesis, diarrheal syndrome, types of diarrhea; etiology, epidemiology, pathogenesis, clinical manifestations of cholera; to develop professional skills in drawing up an examination plan (laboratory and instrumental) for a cholera patient, a comprehensive treatment plan for a cholera patient, and a plan for the necessary preventive measures in a cholera outbreak.

Basic concepts:

Diarrheal syndrome, cholera, rotavirus infection, dehydration shock

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational measures (greetings, verification of those present, announcement of the topic, purpose of the class, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge a student should know the answers to the questions.
 - Diarrheal syndrome: etiology, pathogenesis, classification depending on the type of micro- and macroorganism interaction, clinical features, laboratory diagnostics
 - Rotavirus infection: etiology, epidemiology.
 - Rotavirus infection: pathogenesis, clinic.
 - Rotavirus infection: principles of diagnosis and treatment.
 - Cholera etiology, epidemiology
 - The duration of the incubation period of cholera
 - Key symptoms of cholera.
 - Degrees of dehydration.
 - Clinical classification of cholera.
 - Complications of cholera.
 - Clinical manifestations of dehydration shock.
 - Differential diagnosis of dehydration shock with shock states of other genesis.
 - Plan of examination of a patient suspected of cholera.
 - Methods of specific diagnosis of cholera.
 - Indications for etiotropic therapy of cholera. Drugs, doses, route of administration, duration of appointment.
 - Pathogenetic treatment of cholera.
 - Preventive measures and immunoprophylaxis.
 - Rules for discharging a cholera patient from a hospital.
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, life and disease history, epidemiological history of a patient with diarrheal syndrome;
- make a physical examination of a patient with diarrheal syndrome and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with diarrheal syndrome and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with diarrheal syndrome;
- to determine the tactics of providing emergency medical care in emergency situations in a patient with diarrheal syndrome;
- to create a comprehensive treatment plan for a patient with diarrheal syndrome based on a preliminary clinical diagnosis, adhering to relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine cholera prevention measures;
- draw up the medical documentation of a cholera patient;
- make a report on the results of the examination of a patient with diarrheal syndrome by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of establishing the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

A 32-year-old patient after a business trip to the Mykolaiv region in the middle of the summer suddenly developed: profuse diarrhea (up to 20 times a day), general weakness, dizziness. At the end of the first day of the disease, the stools became watery, in the form of rice-water without fecal odor, on the second day, vomiting joined without prior nausea. On examination: body temperature 36.5° C, heart rate 90/min., blood pressure 90/60 mmHg, skin turgor is reduced, voice is hoarse, face is pinched, tonic cramps in the calf muscles.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 2

A 5-year-old boy, who had just returned from the south, after eating champignons, had frequent profuse, watery, cloudy-white stools with flakes. The child's consciousness is clear, the body temperature is subfebrile, the tongue and mucous membranes are dry, palpation of the abdomen is not painful, there is gurgling and rumbling in the epigastrium.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 44-55
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P 553-559.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, О. Zubach, О. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 4

Topic: "Salmonellosis. Dysentery. Amebiasis" -2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of salmonellosis, dysentery, amebiasis; to develop professional skills in drawing up a plan for the examination of patients with salmonellosis, dysentery, amebiasis (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures in the focus of salmonellosis, dysentery, amebiasis.

Basic concepts:

Salmonellosis, dysentery, amebiasis.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the class, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge a student should know the answers to the questions.
 - Salmonellosis: etiology, epidemiology, pathogenesis
 - Salmonellosis: classification, clinical course
 - Salmonellosis: laboratory diagnosis, differential diagnosis, complications
 - Modern methods of treatment of salmonellosis, medical care at the pre-hospital stage
 - Indications for hospitalization, discharge rules. Principles of salmonellosis prevention
 - Etiology, epidemiology, classification of shigellosis
 - Clinical course of dysentery
 - Dysentery: laboratory diagnosis, differential diagnosis, complications
 - Modern methods of treatment of dysentery, medical care at the pre-hospital stage
 - Indications for hospitalization, discharge rules. Principles of prevention of dysentery
 - Amebiasis, etiology, epidemiology, classification
 - The current state of the incidence of amebiasis in Ukraine and the world.
 - Clinical course of amebiasis. Possible complications of amebiasis.
 - Plan of examination of a patient with amebiasis. Feces examination of a patient with amebiasis in the period of exacerbation of the disease.
 - Methods of specific diagnosis of amebiasis.
 - Basic diagnostic criteria for amebiasis.
 - Principles of therapy for amebiasis patients.
 - Rules for discharge of convalescents from a hospital.
 - Prevention of amoebiasis (specific, non-specific).
 - Terms of dispensary supervision.
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, life history and disease history, epidemiological history of patients with salmonellosis, dysentery, amebiasis;
- make a physical examination of a patient for salmonellosis, dysentery, amoebiasis and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient for salmonellosis, dysentery, amoebiasis and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with salmonellosis, dysentery, amoebiasis;
- create a comprehensive treatment plan for a patient with salmonellosis, dysentery, amoebiasis on the basis of a previous clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine measures to prevent salmonellosis, dysentery, amebiasis;
- draw up the medical documentation of a patient with salmonellosis, dysentery, amebiasis;
- make a report on the results of the examination of a patient for salmonellosis, dysentery or amebiasis by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

8 hours after eating home made scrambled duck eggs, the patients developed the following symptoms: temperature - 39°C, headache, vomiting, abdominal pain, later - diarrhea. Excretions are frequent, with mucus, smelly. The duration of the disease is 3 days. What is the probable etiology of disease?

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 2

Patient A., 22 years old, a student, was admitted to the infectious disease hospital on the 3rd day of illness with complaints of general weakness, spastic pain in the abdomen, frequent liquid stools with mucus and blood. The disease began with an increase in temperature, headache, tenesmus, frequent bowel movements. He lives in an isolated apartment with communal facilities. All family members are healthy. A week ago he returned from the village where there were cases of a similar disease.

On examination: body temperature 38.1°C. The skin is pale, there is no rash, the tongue is moist, coated with a white coating. Heart sounds are muffled, blood pressure 110/80 mm Hg, pulse 96 bpm. The abdomen is moderately swollen, painful along the colon. The sigmoid colon is spasmotic, sharply painful. Stool up to 10 times a day, stools are liquid, with mucus and blood.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 3

Patient K., 27 years old, a cook, was admitted to the infectious hospital on the second day of illness with complaints of headache, frequent (up to 15 times a day) loose stools, nausea, vomiting, pain in the lower abdomen, false calls to defecation. The disease began acutely with chills, an increase in body temperature up to 39°C, repeated vomiting. After 5–7 hours, a strong spasm-like pain in the abdomen appeared, which worsened before defecation, liquid stools with admixtures of mucus and streaks of blood.

On examination: 38.2°C, lethargic. The skin is pale, turgor is preserved. Heart tones are

weakened. Blood pressure 100/60 mm Hg. Pulse 104 beats/min. The tongue is dry, covered with a gray coating. The abdomen is soft, painful during palpation, "grumbling" is felt along the colon and sigmoid spasm. Liver near the edge of the costal arch. Excretions are fecal, semi-liquid, with admixtures of mucus, up to 10 times a day. Urination is not disturbed.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 4

Patient G., 27 years old, complains of malaise, decreased appetite, fatigue, pain in the lower abdomen, mainly in the right pubic area, defecation about 10 times a day, feces have the appearance of "raspberry jelly". Complaints appeared 2 days ago.

On examination: temperature 36.7°C, skin of normal color, turgor preserved. The tongue is covered with a white plaque, there is pain along the large intestine, spasm of the cecum and the ascending part of the colon. The liver and spleen are not enlarged. It is known from the anamnesis that he returned from Africa two weeks ago.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 5

Patient V., 41 years old, complained of intermittent pain in the lower abdomen, more often in the iliac regions, decreased appetite, a feeling of bitterness in the mouth, headache, sleep disturbances, weight loss. Defecation with admixtures of blood and mucus, there is alternating diarrhea and constipation. He has been sick for more than a year, but he did not seek help.

On examination: pale, dry skin, no rash. The body temperature is 37.1°C, the heart sounds are muffled, the tongue is coated, during palpation the abdomen is sensitive along the colon, mainly in the right iliac region, the sigmoid is not spasmodic. In the general blood analysis: anemia, slight eosinophilia, relative lymphocytosis.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубоської. К.: ВСВ «Медицина», 2018. –с. 55-66, 77-87, 149-158.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 537-549, 1062-1069.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, О. Zubach, О. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class #5

Subject: "Botulism. Food toxic infections"-2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of botulism and food poisoning; to form professional skills in drawing up a plan for examining a patient for botulism and food poisoning (laboratory and instrumental), drawing up a comprehensive plan for the treatment of a patient and necessary preventive measures in the center of botulism and food poisoning.

Basic concepts:

Botulism, food poisoning

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge a student must know the answers to the questions.

- Etiology, epidemiology of botulism.
- Pathogenesis. Classification of botulism.
- The main clinical syndromes of botulism.
- Specific complications of botulism
- Differential diagnosis of botulism.
- Examination plan for a botulism patient.
- Methods of specific diagnosis of botulism. Interpretation of laboratory test results.
- Specific therapy of botulism: doses, route of administration of serum, duration of treatment.
- Emergency care for a patient with botulism.
- Rules for discharge of convalescents from a hospital.
- Prevention and measures in the cell.
- Etiology, epidemiology of food born infections.
- Pathogenesis. Classification of food born infections.
- Clinical manifestations, complications of food born infections.
- Differential diagnosis of food born infections.
- Examination plan of a patient with food born infections.
- Methods of specific diagnosis of food born infections. Interpretation of laboratory test results.
- Principles of treatment of patients with food born infections.
- Rules for discharge of convalescents from a hospital.
- Prevention and measures in the food born infections focus.

3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, life history and disease history, epidemiological history, from patients with botulism and food poisoning;

- make a physical examination of the patient for botulism, food poisoning and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of the patient for botulism and food poisoning and analyze the obtained results;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with botulism and food poisoning;
- to determine the tactics of providing emergency medical care in case of emergency conditions in patients with botulism and food toxic infections;
- to create a comprehensive treatment plan for a patient with botulism and food toxic infections based on a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine measures to prevent botulism and food toxic infections;
- draw up the medical documentation of a patient with food poisoning;
- make a report on the results of the examination of a patient for botulism and food poisoning by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

Patient N., 22 years old, was taken to the hospital by ambulance. The general condition is severe, the patient is adynamic. The upper eyelids are lowered, the patient cannot open her eyes without the help of her hands. The skin is pale, with a cyanotic shade, the tone of the skeletal muscles is reduced, the heart sounds are muffled, extrasystole, heart rate 130 bpm., breath rate 40 per min, shallow breathing. The day before, she ate canned cucumbers. Other family members have a food poisoning clinic, vision disorders.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 2

Patient K., 38 years old, was hospitalized with complaints of headache, dizziness, general weakness, "net", "fog", double objects in front of the eyes, impaired vision. Later, difficulty swallowing and dry mouth appeared. The day before, the patient had eaten canned mushrooms. Objectively: ptosis, mydriasis, anisocoria, hoarse voice, slurred speech. During auscultation, hard breathing is heard in the lungs, BR 28 per min. Heart sounds are muffled, expansion of the limits of relative dullness of the heart to the left, HR 95 per min., blood pressure 140/95 mm Hg. 17tr.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Clinical case 3

A 30-year-old patient was admitted to an infectious disease hospital with complaints of sharp pain in the epigastric region, headache, nausea, repeated vomiting, weakness, temperature rise to 38°C. The onset of the disease is acute. He's got sick 30 minutes after eating a cake with cream.

On examination: a condition of moderate severity. The skin is pale. The tongue is wet, coated with a white coating. The pulse is rhythmic, 100 beats per minute. Heart tones are pure. BP 95/65. Lungs - without features. The abdomen is soft, painful in the epigastric region. The liver and spleen are not enlarged. There are no symptoms of peritoneal irritation. Defecation 4 times, liquid, without pathological impurities. Diuresis is preserved. Meningeal signs are not determined.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

4. Assessment of students, summing up, announcement of the next lesson topic.
5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 66-71, 116-130.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 287-294, 456-460.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 6

Topic: "General characteristics of infectious diseases with an airborne mechanism of transmission. Flu." - 2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of infectious diseases with an airborne mechanism of transmission; peculiarities of etiology, epidemiology, pathogenesis, clinical manifestations of influenza; to develop professional skills in drawing up an examination plan (laboratory and instrumental), drawing up a comprehensive treatment plan for a patient with influenza and necessary preventive measures in the focus of influenza.

Basic concepts:

Infectious diseases with an airborne mechanism of transmission, influenza.

Equipment: illustrative material, tables, thematic patients

Plan

6. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

7. Control of the reference level of knowledge is carried out by the method of frontal survey. In order to control the reference level of knowledge the student must know the answers to the questions.

- The place of infectious diseases with an airborne mechanism of transmission in the structure of infectious pathology.
 - Epidemiological, pathogenetic, clinical features of infectious diseases of the respiratory tract.
 - Etiology, epidemiology of influenza.
 - Pathogenesis of influenza.
 - Classification of influenza.
 - Describe the main clinical symptoms and name the severity criteria of influenza.
 - Complications of influenza and their diagnostic criteria.
 - Plan of examination of a patient with influenza.
 - Methods of specific diagnosis of influenza.
 - Etiotropic therapy of influenza and principles of basic therapy.
 - The term and indications for the appointment of antibacterial therapy for influenza.
 - Non-specific and specific prevention of influenza.
 - Categories of persons to whom vaccination is indicated in the first place.
8. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, anamnesis of life and illness, epidemiological anamnesis of a patient with influenza;
- make a physical examination of a patient and determine the main symptoms of the disease;

- prescribe a set of laboratory and instrumental tests for a patient with influenza and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with influenza;
- to determine the tactics of providing emergency medical care in case of emergency conditions in a patient with influenza;
- to create a comprehensive treatment plan for a patient with influenza based on a preliminary clinical diagnosis, adhering to relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine flu prevention measures;
- draw up the medical documentation of a flu patient;
- make a report on the results of the examination of a patient with influenza by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

The patient turned to the family doctor on the 3rd day of illness. The disease began sharply with an increase in body temperature to 39° C, chills, a severe headache localized in the forehead, brow ridges, body aches. On the 2nd day, he developed a dry cough with tightness behind the sternum, a dry and scratchy throat, and a stuffy nose. During the examination: temperature 38.5° C, hyperemia of the skin of the face and upper half of the body, injection of scleral vessels, hyperemia, granularity and dryness of the mucous membrane of the pharynx, BP 110/60, pulse 90/min., BR 20 in 1 min.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 2

Patient P., 28 years old, became acutely ill. The disease began with chills, pain in the lower back, muscles, intense headache in the frontal area, eyeballs. The temperature rose to 39° C. On the second day of illness, a dry cough and nasal congestion appeared. During the examination, the temperature is 39.2° C, the face is hyperemic, swollen. Injection of scleral vessels. Marked hyperemia of the pharynx, granular enanthema on the soft palate. Vesicular breathing in the lungs. Heart sounds are dull, pulse 100/min.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 3

In a 5-year-old patient who was treated at home for the flu with anti-influenza, aspirin, calcium gluconate, on the second day after the onset of the disease, vomiting of coffee ground appeared.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

9. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

10. List of recommended literature (main, additional, electronic information resources):

Main:

3. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ /

Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 218-233

4. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

4. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 783-790.
5. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
6. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

8. www.who.int- World Health Organization
9. www.ama-assn.org–American Medical Association /American Medical Association
10. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
11. <http://bma.org.uk>– British Medical Association
12. www.gmc-uk.org- General Medical Council (GMC)
13. www.bundesaerztekammer.de– German Medical Association
14. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical lesson No. 7

Topic: "Coronavirus infection (SARS, MERS, COVID-19). Enteroviral diseases (diseases caused by Cocksackie viruses, ESNO and unqualified enteroviruses, poliomyelitis)" – 2 hours

Goal:

To improve the knowledge of the applicants regarding etiology, epidemiology, pathogenesis, clinical manifestations of coronavirus infection, enterovirus infections; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive treatment plan for a patient with a coronavirus infection, and the necessary preventive measures.

Basic concepts: Corona virus infection, SARS, MERS, COVID-19, enterovirus diseases, diseases caused by Cocksackie viruses, ESNO, diseases caused by unqualified enteroviruses

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
 - Etiology, pathogenicity factors and epidemiology of coronavirus and enterovirus infections;
 - Pathogenesis of coronavirus and enterovirus infections;
 - Probable, suspected and confirmed case;
 - Clinical manifestations of coronavirus and enterovirus infections;
 - Clinical manifestations of complications;
 - Laboratory diagnostics;
 - Principles of treatment;
 - Differential diagnosis;
 - Indications for hospitalization;
 - Rules for discharge of patients with coronavirus and enterovirus infections from an infectious hospital;
 - Principles of prevention;
3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a patient with coronavirus and enterovirus infections, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a patient for coronavirus and enterovirus infections and determine the main symptoms of the disease;
- prescribe a set of laboratory and instrumental tests for a patient with coronavirus and enterovirus infections and analyze the results obtained;
- carry out differential diagnosis and justify the clinical diagnosis of a patient with coronavirus and enterovirus infections;
- to create a comprehensive treatment plan for a patient with coronavirus and enterovirus infections based on a preliminary clinical diagnosis, adhering to relevant ethical and legal

norms, by making a reasoned decision according to existing algorithms and standard schemes.

- determine measures to prevent coronavirus and enterovirus infections;
- draw up the medical documentation of a patient with a coronavirus infection and enterovirus infections;
- to make a report on the results of the examination of the patient for coronavirus infection and enterovirus infections by the team of examiners in the study group, analysis under the guidance of the teacher of the correctness of establishing the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the lesson

Situational task1

A 42-year-old patient turned to his family doctor with complaints of an increase in body temperature to 38°C, chills, general weakness, headache, muscle pain, dry cough. He stopped smelling since yesterday. He was in contact with a colleague who was diagnosed with the SARS-Cov-2 virus.

1. Preliminary diagnosis.
2. Methods of laboratory diagnostics.
3. Principles of treatment

Situational task 2

A 45-year-old patient came to the hospital with complaints of fever, headache, dry cough, shortness of breath, and chest pain. During the examination: the condition is severe, adynamic, the skin is pale, cyanosis of the lips. Heart rate - 120 per minute, BP - 28 per minute, SpO2 - 88%. A CT scan of the lungs revealed "frosted glass" changes on both sides.

1. Preliminary diagnosis.
2. Survey plan.
3. Specific prevention

Situational task 3

A 24-year-old patient complains of a sore throat. The mucous membrane of the oral part of the throat is moderately hyperemic, there are bubbles filled with serous fluid on the mucous membrane of the soft palate and tonsils.

1. Preliminary diagnosis
2. Survey plan
3. Treatment plan

Situational task 4

A 19-year-old patient fell ill suddenly: the body temperature rose to 38 °C, there were attacks of severe pain in the muscles of the chest for 30-40 minutes, which were repeated several times during the day. During an attack, breathing is shallow. In the period between attacks, the muscles are painless during palpation. The mucous membrane of the oral part of the throat is moderately hyperemic. There are no rales in the lungs. The most likely diagnosis:

1. Preliminary diagnosis
2. Survey plan
3. Treatment plan

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубоської. К.: ВСВ «Медицина», 2018. –с. 244-245, 259-264.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 776-778.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 8

Topic: "Meningeal syndrome in the clinic of infectious diseases. Meningococcal infection" – 2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of meningococcal infection; to develop professional skills in drawing up an examination plan (laboratory and instrumental), drawing up a comprehensive treatment plan for a patient with meningococcal infection.

Basic concepts: meningeal syndrome, meningococcal infection, meningism, serous and purulent meningitis, secondary meningitis.

Equipment: illustrative material, tables, thematic patients.

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
 - Control of the reference level of knowledge is carried out by the method of frontal survey. In order to control the reference level of knowledge the student must know the answers to the questions.
 - Pathogenesis of meningeal syndrome
 - Etiology, epidemiology, pathogenesis of meningococcal infection.
 - Classification of clinical forms of meningococcal infection.
 - Main clinical manifestations of meningococcal nasopharyngitis.
 - Main manifestations and clinical forms of meningococcemia.
 - Complications of meningococcemia.
 - Main clinical manifestations of meningococcal meningitis and meningoenzephalitis.
 - Complication of meningococcal infection.
 - The main causes of mortality in generalized forms of meningococcal infection.
 - Examination plan for a patient with meningococcal infection.
 - Methods of specific diagnosis of meningococcal infection. Etiotropic therapy of various forms of meningococcal infection: drugs, doses, routes of administration, duration of treatment.
 - Sanitation of meningococcus bacteria carriers.
 - Principles of pathogenetic therapy of generalized forms of meningococcal infection.
 - Rules for discharge of convalescents from a hospital.
 - Dispensary monitoring of convalescents.
 - Measures in the center of meningococcal infection.
 - ITS: definition, pathogenesis, classification, clinical and laboratory diagnosis, emergency care.
 - Brain edema: definition, pathogenesis, classification, clinical and laboratory diagnosis, emergency care
2. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, life and disease history, epidemiological history of a patient with meningococcal infection;

- make a physical examination of a patient with meningococcal infection and determine the main symptoms of the disease;
- prescribe a set of laboratory and instrumental tests for a patient with meningococcal infection and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with meningococcal infection;
- create a comprehensive treatment plan for a patient with meningococcal infection on the basis of a previous clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine measures to prevent meningococcal infection;
- draw up the medical documentation of a patient with meningococcal infection;
- make a report on the results of the examination of a patient for meningococcal infection by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

Patient S., 32 years old, complains of general malaise, sore throat, headache, weakness. He has been ill for the 3 days, the temperature arose up to 37.5-37.8°C. Objectively, the general condition is satisfactory. The skin is pale, there is no rash. Conjunctivitis, scleritis. Pronounced hyperemia of the mucous membrane of the back wall of the pharynx with purulent "tracks". Moderately painful submandibular lymph nodes are palpated. No pathology was detected on the part of the internal organs.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 2

Patient K., 30 years old, a teacher, was hospitalized in the clinic on the 2nd day of illness with a diagnosis of "influenza, hypertoxic form". The disease began violently with an increase in temperature to 40° C. There was a sharp headache, vomiting, photophobia. The general condition is severe, consciousness is confused. The skin is pale. Hemorrhagic star-like rash on the skin of the abdomen, buttocks and lower limbs. Pronounced rigidity of the muscles of the back of the head and Kernig's symptom. No pathology was detected on the part of the internal organs. During a spinal puncture under high pressure, a turbid liquid with high neutrophilic pleocytosis was obtained - 47,200 in 1 µl, protein - 2.64 g/l, Pandey's reaction ++++.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 3

Patient P., 32 years old, drug abuser, his condition is very serious, he is unconscious. His wife mentioned, he became acutely ill 2 days ago, when the body temperature arose up to 39°C, a headache and vomiting appeared, on the 2nd day the temperature was 40.2°C, the pain increased, vomiting was repeated. In the evening, the condition worsened. The patient lost consciousness. Objectively: no contact, pronounced psychomotor excitement. The skin of the face and trunk is hyperemic, there is no rash. The mucous membrane of the lips is cyanotic. Frequent shallow breathing. Heart sounds are muffled, pulse 140 per minute, weak filling. Blood pressure - 140/95 mm Hg. Abdomen is soft, painless. Stiffness of the muscles of the back of the head. Positive symptoms of Kernig and Brudzinsky.

1. Make a preliminary diagnosis.

2. Plan of laboratory examination.
3. Treatment.

Clinical case 4

An 11-year-old child on the fifth day from the beginning of the disease developed enlargement and edema of parotid salivary glands, high temperature up to 39°C, headache, vomiting up to 6 times a day.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 5

A 25-year-old patient complains of headache, pain in the eyeballs, vomiting, fever. Consciousness preserved, excited, temperature 38.9° C. Pronounced sensory meningeal syndromes, Kernig's symptom. Tendon and abdominal reflexes are preserved and suppressed. The function of the cranial nerves is not disturbed. In the cerebrospinal fluid - lymphocytic cytolysis.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

3. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

4. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 327-338.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 334-360, 466-475.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesärztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 14

Topic: "Diphtheria" – 2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of diphtheria; to develop professional skills in drawing up a plan for examining a patient for diphtheria (laboratory and instrumental), a comprehensive plan for the patient's treatment.

Basic concepts:

Diphtheria, true croup, serum sickness, anaphylactic shock

Equipment: illustrative material, tables, thematic patients

Plan:

1. 1. Organizational measures (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. In order to control the reference level of knowledge the student must know the answers to the questions.
 - Etiology, epidemiology of diphtheria.
 - The nature of immunity in diphtheria.
 - The main links of the pathogenesis of diphtheria.
 - Classification of diphtheria.
 - Clinical manifestations of diphtheria.
 - Features of the course of laryngeal diphtheria.
 - Stages of diphtheria croup.
 - Differential diagnosis of diphtheria croup and false croup.
 - In which infectious diseases, in addition to diphtheria and tonsillitis, can the tonsils be damaged.
 - Differential diagnosis of diphtheria and angina
 - Specific laboratory diagnosis of diphtheria.
 - Non-specific laboratory tests for diphtheria.
 - Complications of diphtheria
 - Principles of treatment of diphtheria.
 - Etiotropic therapy of diphtheria.
 - Characteristics of emergency conditions in diphtheria.
 - Rules for administration of anti-diphtheria serum.
 - Prevention of diphtheria.
 - Anti-epidemic measures in the focus of diphtheria

3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, prescribe laboratory research).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- collect complaints, life and disease history, epidemiological history of a diphtheria patient;

- make a physical examination and determine the main ones;
- prescribe a complex of laboratory and instrumental studies of a patient with diphtheria and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a diphtheria patient;
- to determine the tactics of providing emergency medical care in emergency situations in patients with diphtheria;
- to create a comprehensive plan for the treatment of a diphtheria patient based on a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine diphtheria prevention measures;
- draw up the medical documentation of a diphtheria patient;
- make a report on the results of the examination of a patient with diphtheria by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity

Materials for the final stage of the class

Clinical case 1

Patient D. was brought to the reception department of the Central Hospital the night before due to high temperature, sore throat, and general weakness. Objectively: hyperemia, edema, cyanosis, mucous membrane of the left palatine tonsil, oro- and nasopharynx. The surface of the tonsils is covered with a dirty gray plaque.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 2

The patient came to the doctor with complaints of a temperature rise to 37.8° C, a moderate pain in the throat for 3 days. Objectively: the submandibular lymph nodes are enlarged up to 3 cm. The tonsils are hypertrophied, covered with a gray, smooth coating that extends to the tongue, anterior palatal arches.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Clinical case 3

Patient K., 27 years old, was admitted to the hospital on the 3rd day of illness with complaints of increased body temperature, headache, and sore throat. On examination: The mucous membrane of the oropharynx is swollen, hyperemic, cyanotic. On the tonsils there are islands of dense, grayish plaques that do not go beyond their limits. Submandibular lymph nodes are enlarged, moderately painful.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 282-292.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 443-448.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 10

Topic: "General characteristics of viral hepatitis.

Viral hepatitis with the fecal-oral transmission mechanism" - 2 hours

Goal:

To improve the knowledge of the applicants regarding the etiology, epidemiology, pathogenesis, clinical manifestations of viral hepatitis with fecal-oral transmission mechanism; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts:

Viral hepatitis with a fecal-oral transmission mechanism, viral hepatitis A, viral hepatitis E.

Equipment: illustrative material, tables, thematic patients

Plan:

11. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

12. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.

- What is the etiology of viral hepatitis A?
- What are the epidemiological features of viral hepatitis A?
- What are the main links of the pathogenesis of viral hepatitis A?
- What are the main clinical symptoms and syndromes of viral hepatitis A?

- What are the possible complications of viral hepatitis A?
- What non-specific and specific diagnostic methods are necessary for viral hepatitis A?
- What are the main principles of treatment of viral hepatitis A?
- What is the etiology of viral hepatitis E?
- What are the epidemiological features of viral hepatitis E?
- What are the main links of the pathogenesis of viral hepatitis E?
- What are the main clinical symptoms and syndromes of viral hepatitis E?
- What are the features of the course of viral hepatitis E in pregnant women?
- What are the possible complications of viral hepatitis E?
- What non-specific and specific diagnostic methods are necessary for viral hepatitis E?

13. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a patient with viral hepatitis from the fecal-oral transmission mechanism, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a patient with viral hepatitis with a fecal-oral transmission mechanism and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with viral hepatitis with a fecal-oral transmission mechanism and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with viral hepatitis with fecal-oral transmission mechanism;
- determine the tactics of providing emergency medical care in emergency situations in patients with viral hepatitis with fecal-oral transmission mechanism;
- to create a comprehensive treatment plan for a patient with viral hepatitis with a fecal-oral transmission mechanism based on a previous clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine measures for the prevention of viral hepatitis with fecal-oral transmission mechanism;
- draw up the medical documentation of a patient with viral hepatitis with a fecal-oral transmission mechanism;
- to make a report on the results of the examination of a patient for viral hepatitis with the fecal-oral transmission mechanism by the team of examiners in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the lesson

Situational task 1

A 17-year-old patient entered the clinic on the 6th day of illness. He fell ill acutely with an increase in body temperature to 39°C, weakness, on the 2nd day of the illness, his appetite decreased, the temperature was maintained for 4 days, then it dropped to normal, on the 5th day of the illness, the urine darkened. General: T- 36.8oC, skin and mucous membranes are subicteric, without rash. The abdomen is soft and painless on palpation, the liver is enlarged, the spleen is not palpable. Heart rate - 64 beats/min. Blood pressure - 110/70 mm Hg.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment.

Situational task 2

The patient is 27 years old, a student, lives in a dormitory. He came to the clinic on the 5th day of illness with complaints of yellowing of the sclera and skin, weakness, lack of appetite. The disease began acutely with a rise in temperature to 38.0°C, there was no catarrhal syndrome. She did not take medicine, there were cases of viral hepatitis A in the dormitory. General: T - 36.3°C, slight weakness. Moderate jaundice of the skin and sclera, no rash. The abdomen is soft, painless in all parts, the liver is enlarged, painless, the spleen is palpable near the costal arch. Pulse - 64 bpm, blood pressure - 110/70 mmHg. In the blood, leukopenia, relative lymphocytosis, SZE - 5 mm/h are noted.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Situational task 3

Patient E., 18 years old, was admitted to the infectious disease department on the 6th day of illness with complaints of dry mouth, nausea, lack of appetite, darkening of urine. He fell ill acutely, the disease began with an increase in body temperature to 38.5°C, weakness. After 3 days, the temperature dropped to normal values, but the weakness remained, nausea increased, and the mouth appeared. I was taking paracetamol at home, in connection with the appearance of icteric sclera, I will consult a doctor. Noticeable Ob-but: the condition is difficult, in consciousness, adequate. T body - 36.7°C, skin without rash, moderately icteric, pale. The tones of the heart are sonorous, the rhythm is correct. The abdomen is soft, painful in the epigastrium upon palpation, the liver and spleen are moderately enlarged, Voskresensky's symptom is positive, there are no symptoms of abdominal irritation.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment

Situational task 4

Patient A., 23 years old, 16 weeks pregnant. She was acutely fatigued, body temperature rose to 38.5°C, weakness, headache, and nausea were noted. From the 3rd day of illness, the appetite disappeared, there was vomiting several times. On the 5th day, she noticed the appearance of jaundice on the skin, at the same time, the urine darkened. It is known from the anamnesis that she lived in Uzbekistan for the last 3 months, she suffered viral hepatitis A as a child, which was confirmed serologically.

During the examination: T of the body is 36.8°C, the patient is lethargic, a little inhibited. The color of the skin and mucous membranes is subicteric, on the skin of the body there is a single hemorrhagic rash. Peripheral lymph nodes are not palpable. The abdomen is soft, painless, the liver is slightly enlarged, of a soft consistency, the edge of the spleen is palpable. The mucous membrane of the oropharynx is icteric. The pulse is 92 bpm, blood pressure is 110/70 mmHg, heart sounds are muffled, breathing is vesicular, there are no meningeal signs. An. blood: Er. - 4.6'10¹²/l, lake. - 8.1'10⁹/l, p-6%, z-64%, l-25%, m-5%, SZE -10mm/h.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Task 5

2 months after returning from India, where she often drank unboiled water, a 23-year-old pregnant woman felt nausea, severe general weakness, headache, later rose to 38 °C, which persisted for a week. On the 6th day, jaundice appeared, the general condition continued to deteriorate. On the 12th day of illness, the general condition is severe. Euphoric. Vomiting at night. Complete aversion to food. Bright jaundice, signs of hemorrhagic syndrome, tachycardia. Blood

pressure 110/60 mm Hg, temperature 37.8 °C. The liver is slightly enlarged, soft, painful, the spleen +2 cm. In the general blood analysis, neutrophilic leukocytosis. Total blood bilirubin 570 µmol/l, direct - 300, AlAT - increased 100 times, thymol test - 26 units, urea - 2.1 mmol/l. The patient is most likely to:

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

14. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

15. List of recommended literature (main, additional, electronic information resources):

Main:

5. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27
6. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

7. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
8. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
9. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

15. www.who.int- World Health Organization
16. www.ama-assn.org–American Medical Association /American Medical Association
17. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
18. <http://bma.org.uk>– British Medical Association
19. www.gmc-uk.org- General Medical Council (GMC)
20. www.bundesaeztekammer.de– German Medical Association
21. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 11

Topic: "Acute viral hepatitis with a parenteral transmission mechanism" - 2 hours

Goal:

To improve the knowledge of the applicants regarding the etiology, epidemiology, pathogenesis, clinical manifestations of viral hepatitis with a parenteral transmission mechanism; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts:

Viral hepatitis with a parenteral transmission mechanism, viral hepatitis B, viral hepatitis C, viral hepatitis D.

Equipment: illustrative material, tables, thematic patients

Plan:

6. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

7. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
- What is the etiology of viral hepatitis B?
 - What are the epidemiological features of viral hepatitis B?
 - What are the main links of the pathogenesis of viral hepatitis B?
 - What are the main clinical symptoms and syndromes of viral hepatitis B?
 - What are the possible complications of viral hepatitis B?
 - What non-specific and specific diagnostic methods are necessary for viral hepatitis B?
 - What are the main principles of treatment of viral hepatitis B?
 - What are the main directions of prevention of viral hepatitis B?
 - What is the etiology of viral hepatitis C?
 - What are the epidemiological features of viral hepatitis C?
 - What are the main links of the pathogenesis of viral hepatitis C?
 - What are the main clinical symptoms and syndromes of viral hepatitis C?
 - What are the possible complications of viral hepatitis C?
 - What non-specific and specific methods of diagnosis are necessary for viral hepatitis C?
 - What are the main principles of treatment of viral hepatitis C?
 - What are the main directions of prevention of viral hepatitis C?
 - What is the etiology of viral hepatitis D?
 - What are the epidemiological features of viral hepatitis D?
 - What are the main links of the pathogenesis of viral hepatitis D?
 - What are the main clinical symptoms and syndromes of viral hepatitis D?
 - What are the possible complications of viral hepatitis D?
 - What non-specific and specific diagnostic methods are necessary for viral hepatitis D?
 - What are the main principles of treatment of viral hepatitis D?
 - What are the main directions of prevention of viral hepatitis D?
8. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a patient with viral hepatitis with a parenteral transmission mechanism, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a patient with viral hepatitis with a fecal-oral transmission mechanism and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with viral hepatitis with a parenteral transmission mechanism and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with viral hepatitis with a parenteral transmission mechanism;
- determine the tactics of providing emergency medical care in emergency situations in patients with viral hepatitis with a parenteral transmission mechanism;
- to create a comprehensive treatment plan for a patient with viral hepatitis with a parenteral transmission mechanism based on a previous clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine measures for the prevention of viral hepatitis with a parenteral transmission mechanism;
- draw up the medical documentation of a patient with viral hepatitis with a parenteral transmission mechanism;

- make a report on the results of the examination of a patient with viral hepatitis with a parenteral mechanism of transmission by a team of examiners in a study group, an analysis under the guidance of a teacher of the correctness of establishing a diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the lesson

Situational task1

Patient K., 60 years old, was operated on for rectal adenocarcinoma 3 months ago. The condition after the operation gradually improved, but about 3 weeks ago he began to notice increased fatigue, increasing general weakness, and a worsening of appetite. A week later, nausea, pain in the joints, heaviness in the right hypochondrium appeared, sleep worsened. 2 days ago, feces became lighter, urine became darker, health worsened, skin itching appeared.

During the examination - moderate jaundice of the skin and sclera. There is no rash. The stomach is soft. The liver is enlarged to +3 cm, the edge is even, moderately dense. The lower pole of the spleen is palpated. There are increased bile pigments in the urine.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task2

Patient L., 20 years old, a student, cannot specify the exact time of illness. Approximately 10 days before hospitalization, she noted an increase in fatigue, general weakness, and deterioration of appetite. The temperature was not measured. In the following days, the state of health worsened: anorexia, nausea, progressive general weakness. But she did not consult a doctor, because she associated her condition with overtiredness (taking care of a 3-month-old child). She sought help after noticing dark urine.

During examination: significant general weakness, dizziness, nausea, 1-time vomiting. Sclera are subicteric. The skin is normal color. Liver +1 cm, palpation of the right hypochondrium is moderately painful. The spleen is not palpable. Pulse 80/min. Blood pressure 110/60 mm Hg.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task3

Patient V., 19 years old, student. I went to the student polyclinic for the second time

A patient with viral hepatitis, who has been in the infectious disease department for 2 weeks, has a sharp deterioration in his general condition, jaundice has developed, the size of the liver has decreased, and a clapping tremor has appeared. Total bilirubin - 387 $\mu\text{mol/l}$, direct - 106 $\mu\text{mol/l}$, albumin - 39 g/l, prothrombin index 71%.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

9. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

10. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОЗ і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27

2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary WKozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англомовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 12

Topic: "AIDS-associated infections and infestations." - 2 hours

Goal:

To improve the knowledge of the recipients regarding the etiology, epidemiology, pathogenesis, clinical manifestations of AIDS-associated infections and invasions; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts: AIDS-associated infections and invasions, herpes infection, cytomegalovirus infection, tuberculosis, toxoplasmosis, cryptosporidiosis, isosporosis, Kaposi's sarcoma, pneumocystis pneumonia, candidiasis.

Equipment: illustrative material, tables, thematic patients.

Plan:

5. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
6. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
 - What is the classification of AIDS-associated infections and invasions?
 - What are the viral AIDS-associated infections?
 - What are the bacterial AIDS-associated infections?
 - What are the fungal AIDS-associated infections?
 - What are the protozoan AIDS-associated infections?
 - What are the principles of non-specific and specific diagnosis of AIDS-associated infections and invasions?
 - What are the general principles of treatment of AIDS-associated infections and invasions?
 - What are the general principles of prevention of AIDS-associated infections and invasions?
7. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a patient with AIDS-associated infections and infestations, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of the patient for AIDS-associated infections and invasions and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient for AIDS-associated infections and invasions and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with AIDS-associated infections and invasions;
- to create a comprehensive treatment plan for a patient with AIDS-associated infections and invasions based on a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

- determine measures to prevent AIDS-associated infections and invasions;
- draw up the medical documentation of a patient with AIDS-associated infections and invasions;
- to make a report on the results of the examination of the patient for AIDS-associated infections and invasions by the team of examiners in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the lesson

Situational task1

Patient M., 14 years old, was admitted to an infectious disease hospital with complaints of a headache, an increase in body temperature to subfebrile numbers, seizures, which have become more frequent recently. He has been ill for the past 4 years. During examination: enlarged peripheral lymph nodes of all groups. Heart sounds are muffled, heart rate is 100 bpm. The lower edge of the liver protrudes from under the edge of the costal arch by 5 cm, the lower edge of the spleen by 1 cm. On the left, the nasolabial fold is smoothed. Tendon reflexes are alive, there are no pathological reflexes. Seizures 2-3 times within an hour. Consciousness during the attacks is preserved, the RZK with toxoplasma antigen is positive.

1. Make a preliminary diagnosis.
2. Additional examination methods
3. Make a treatment plan

Situational task2

A 30-year-old patient, after working for a living, turned to a dermatologist with complaints of a rash all over the skin. Over the past 3 months, he has noticed a sharp weight loss, general weakness, constant low-grade fever.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Situational task3

A 30-year-old man was found to be seropositive for HIV six months ago. The last 3 months - complaints of general weakness, fatigue, drowsiness, headache. The last 2 weeks - anxiety, timidity, depression. 5 days ago, memory disorders and aphasia appeared, sloppiness with their urine and feces.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.

3. Recognition and diagnosis of infectious diseases / Посібник для англомовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical lesson No. 13

Topic: "Infectious diseases with predominant damage to the kidneys: leptospirosis. - 2 hours

Goal:

To improve the knowledge of the applicants regarding the etiology, epidemiology, pathogenesis, clinical manifestations of leptospirosis; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts: leptospirosis.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
 - What is the etiology of leptospirosis?
 - What are the epidemiological features of leptospirosis?
 - What are the main clinical symptoms and syndromes of leptospirosis?
 - What are the complications of leptospirosis?
 - What are the specific methods of diagnosing leptospirosis?
 - What are the main principles of leptospirosis treatment?
3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a leptospirosis patient, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a patient and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with leptospirosis and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with leptospirosis
- to determine the tactics of providing emergency medical care in emergency situations in a patient with leptospirosis;
- to create a comprehensive treatment plan for a patient with leptospirosis based on a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine leptospirosis prevention measures;
- draw up the medical documentation of a leptospirosis patient;
- make a report on the results of the examination of a leptospirosis patient by a team of examiners in the study group, an analysis under the guidance of the teacher of the

correctness of the diagnosis, differential diagnosis, scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the lesson
Situational task1.

A 37-year-old man has been sick for 3 days - the disease began acutely, he felt chilly, T increased to 39.6 C, there was vomiting of "coffee grounds". He took antipyretics without effect. Jaundice, which appeared today, led to hospitalization of the patient with suspicion of viral hepatitis. From the anamnesis, it was found that the patient keeps rabbits, nutria, and a dog in the household. During the examination: conscious, T 39.5 °C; the face is swollen, hyperemic, injection of conjunctival vessels, hemorrhages under the conjunctiva on both sides. Positive pinch symptom, single petechiae on the skin in the area of the collarbones. Breathing is hard. The tones of the heart are muffled, rhythmic. The tongue is dry. The abdomen is not painful, the liver protrudes from under the costal arch 3 cm, the spleen is palpated. Pasternacki's symptom is positive on both sides, daily diuresis is about 300 ml, urine is reddish in color.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task 2.

A 16-year-old boy vacationing in the village became acutely ill after swimming in a pond: his body temperature quickly rose to 39.0 °C, he felt general malaise, muscle pain, especially in the areas of the masticatory and calf muscles. He was examined by the paramedic of the outpatient clinic, was diagnosed with acute respiratory distress syndrome, took aspirin and herbal decoctions. During the examination on the 3rd day of the disease: hyperemia of the face, injection of conjunctival vessels, increasing pain when palpating the muscles. A sparse papular rash on the skin. Tones of the heart are rhythmic, sonorous. Breathing is hard, wheezing cannot be heard. The abdomen is not painful, the liver is elastic, +3 cm, the spleen is not palpable. Urine is darker than usual. The color and consistency of stools have not changed. In addition, it became known that among peers there are similar cases of the disease.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task 3.

A 24-year-old patient was hospitalized in the infectious department with a diagnosis of: Influenza, capillarotoxicosis - severe course. 4th day of illness. The onset is acute with an increase in body temperature up to 39°C, headache, arthralgia and myalgia, nausea, slight dry cough, sore throat. At the end of the 3rd day from the onset of the disease, a hemorrhagic rash appeared on the skin of the upper and lower limbs, trunk, back, bleeding from the gums, nose and intestinal bleeding. The skin is pale, the face is hyperemic, pasty, hepatolienal syndrome. The abdomen is painful and swollen during palpation. A/T 85/60 mm Hg, R - 108 per minute. Meningeal signs are doubtful. The patient works as a zoo technician at a private enterprise near Alushta.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англомовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaeztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical lesson No. 14

Topic: "Infectious diseases with predominant damage to the kidneys: HFRS. Congo-Crimea hemorrhagic fever." - 2 hours

Goal:

To improve the knowledge of the recipients regarding the etiology, epidemiology, pathogenesis, clinical manifestations of HFRS, Congo-Crimea hemorrhagic fever); to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts: hemorrhagic fever with renal syndrome, Congo-Crimea hemorrhagic fever.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
 - What is the etiology of HGNS and Congo-Crimea hemorrhagic fever?
 - What are the epidemiological features of HHNS and Congo-Crimea hemorrhagic fever?
 - What are the main clinical symptoms and syndromes in HHNS and Crimean-Congo hemorrhagic fever?
 - What are the complications of HHNS and Crimean-Congo hemorrhagic fever?
 - What are the specific methods of diagnosing HGNS and Crimean-Congo hemorrhagic fever?
 - What are the main principles of treatment of HGNS and Crimean-Congo hemorrhagic fever?
3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- to be able to communicate with a patient with HCV, Congo-Crimea hemorrhagic fever, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- carry out a physical examination of a patient with HHNS, Crimean-Congo hemorrhagic fever and determine the main symptoms of the disease;
- to prescribe a complex of laboratory and instrumental studies of a patient with HHNS, Congo-Crimea hemorrhagic fever and analyze the results obtained;
- carry out differential diagnosis and justify the clinical diagnosis of a patient with HHNS, Congo-Crimea hemorrhagic fever;
- to determine the tactics of providing emergency medical care in case of emergency conditions in a patient with HHNS, Congo-Crimea hemorrhagic fever;
- to create a comprehensive plan for the treatment of a patient with HCV, Crimean-Congo hemorrhagic fever on the basis of a previous clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine preventive measures of HHNS, Congo-Crimea hemorrhagic fever;

- draw up the medical documentation of a patient with HHNS, Congo-Crimea hemorrhagic fever;
- to make a report on the results of the examination of a patient with GGNS, Crimean-Congo hemorrhagic fever by a team of examiners in the study group, an analysis under the guidance of a teacher of the correctness of establishing a diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the lesson
Situational task1.

A 34-year-old man has been sick for 4 days - the disease began acutely, he felt chilly, T increased to 39.4 C, he vomited "coffee grounds". He took antipyretics without effect. Hospitalized with suspected viral hepatitis. From the anamnesis, it was found that the patient keeps rabbits, nutria, and a dog in the household. During the examination: conscious, T 39.5 °C; the face is swollen, hyperemic, injection of conjunctival vessels, hemorrhages under the conjunctiva on both sides. Positive pinch symptom, single petechiae on the skin in the area of the collarbones. Breathing is hard. The tones of the heart are muffled, rhythmic. The tongue is dry. The abdomen is not painful, the liver protrudes from under the costal arch 3 cm, the spleen is palpated. Pasternacki's symptom is positive on both sides, daily diuresis is about 300 ml, urine is reddish in color.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task 2.

A 16-year-old boy vacationing in the village became acutely ill after swimming in a pond: his body temperature quickly rose to 39.0 °C, he felt general malaise, muscle pain, especially in the areas of the masticatory and calf muscles. He was examined by the paramedic of the outpatient clinic, was diagnosed with acute respiratory distress syndrome, took aspirin and herbal decoctions. During the examination on the 3rd day of the disease: hyperemia of the face, injection of conjunctival vessels, increasing pain when palpating the muscles. A sparse papular rash on the skin. Tones of the heart are rhythmic, sonorous. Breathing is hard, wheezing cannot be heard. The abdomen is not painful, the liver is elastic, +3 cm, the spleen is not palpable. Urine is darker than usual. The color and consistency of stools have not changed. In addition, it became known that among peers there are similar cases of the disease.

1. Preliminary diagnosis.
2. Survey plan.
3. Treatment plan.

Situational task 3.

A 25-year-old patient was hospitalized in the infectious department with a diagnosis of: Influenza, capillarotoxicosis - severe course. 4th day of illness. The onset is acute with an increase in body temperature up to 39°C, headache, arthralgia and myalgia, nausea, slight dry cough, sore throat. At the end of the 3rd day from the onset of the disease, a hemorrhagic rash appeared on the skin of the upper and lower limbs, trunk, back, bleeding from the gums, nose and intestinal bleeding. The skin is pale, the face is hyperemic, pasty, hepatolienal syndrome. The abdomen is painful and swollen during palpation. A/T 85/60 mm Hg, R - 108 per minute. Meningeal signs are doubtful. The patient works as a zoo technician at a private enterprise near Alushta.

1. Preliminary diagnosis.

2. Survey plan.

3. Treatment plan.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 9-27
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaeztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 15

Topic: "Tetanus. Erysipelas" - 2 hours

Goal:

To improve the knowledge of the applicants regarding the etiology, epidemiology, pathogenesis, clinical manifestations of erysipelas and tetanus, to form professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts: tetanus, erysipelas, emergency tetanus prevention, planned tetanus prevention.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education should know the answers to the following questions:
 - What are the directions of non-specific and specific prevention of anthrax?
 - What is the etiology of dysentery?
 - What is the geographical distribution of dysentery?
 - What are the main epidemiological patterns of this dysentery?
 - What are the links of the pathogenesis of dysentery?
 - What are the characteristic manifestations of dysentery?
 - What methods of diagnosis are necessary in case of this disease?
 - What are the principles of treatment of dysentery?
 - What are the directions of non-specific and specific prevention of dysentery?
 - What is the etiology of tetanus?
 - What are the main epidemiological patterns of this disease?
 - What are the links of the pathogenesis of tetanus?
 - What are the characteristic manifestations?
 - What are the available methods of diagnosis of this disease?
 - What specific drugs are used in the treatment of tetanus?
 - What are the basics of planned and emergency prevention of tetanus?
3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.).

Recommendations (instructions) for performing tasks

A student of higher education must:

- be able to communicate with a patient with dysentery, tetanus (if possible) or with relatives, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a tetanus patient and determine the main symptoms of the disease;
- prescribe a complex of laboratory and instrumental studies of a patient with rabies (tetanus) and analyze the results obtained;

- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with tetanus;
- determine the tactics of providing emergency medical care in case of emergency conditions in a patient with tetanus;
- to create a comprehensive treatment plan for a patient with rabies (tetanus) on the basis of a previous clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine preventive measures for tetanus;
- draw up the medical documentation of a patient (tetanus);
- make a report on the results of the examination of a tetanus patient by a team of examiners in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the lesson

Situational task 1.

Patient V., 18 years old, a technical college student, was taken to a psychiatric hospital on August 28 with the diagnosis: "Acute psychosis? Alcoholic delirium? ". Sick on the 3rd day: anxiety, irritability, leg pain, temperature 37.5°C, bad sleep appeared. Today, the condition has worsened: difficulty breathing ("spasms"), profuse salivation, swallowing disorder, sudden excitability, and a feeling of fear have appeared. On examination: restless, not quite adequate, shuddering from touches and loud sounds, with the development of spasms of breathing and swallowing. When trying to drink water from a glass, a spasm of the neck muscles occurs. The pupils are dilated, the eyes wander. Blood pressure 100 / 50 mmHg, pulse 130 bpm, temperature 38.6°C. Breathing rate up to 38 in 1 minute. had no contact with infectious patients. There was a dog at home, which died of "distemper" in July. He did not consult a doctor.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Situational task 2.

Husband V., 20 years old, was admitted to the hospital on the second day of illness with complaints of general weakness, dizziness, drooling, pain in the muscles of the shoulder girdle. I became acutely ill: this morning during breakfast, difficulty in swallowing, dizziness appeared. Sent by an emergency doctor to the hospital. Objectively: the condition is of moderate severity, the temperature is 37.2 ° C. The face is hyperemic. Excited, talkative, afraid of death. There is no rash. He cannot drink water, as spasms of the muscles of the pharynx appear. Profuse salivation. Vesicular breathing in the lungs. AD-120/80 mm Hg. art., pulse 100 beats. in min. Abdomen is painless. There are no meningeal symptoms. History: caught a wolf in the spring, skinned it myself, got injured. Everyone is healthy at home.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Situational task 3.

A resident of a rural area was hospitalized with complaints of convulsions throughout the body, inability to open the mouth, increased body temperature, sweating. The condition is severe, t-39.5°C, tonic tension of the masticatory muscles, the forehead is wrinkled, the eyebrows and wings of the nose are raised, the eyes are narrowed, the painful stiffness of the muscles of the back of the head. Defecation and urination are absent. During the examination, clonic-tonic convulsions of the trunk and limbs appeared.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

Situational task 4.

A patient came to the doctor complaining of difficulty opening his mouth. Two weeks ago, he fell and broke his head, he did not seek medical help. On examination: a condition of moderate severity. The mouth opens by 1.5 cm, the neck muscles are moderately stiff. Paralysis of facial muscles, eyeballs, more pronounced on the right. In the temporal region on the right, there are dried blood crusts at the site of the injury.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубоської. К.: ВСВ «Медицина», 2018. –с. 9-27
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et al]. – New York. - 2017. – P. 2-10., 48-58, 70-79.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical class No. 16

Topic "General characteristics of infectious diseases with a transmissive transmission mechanism. Malaria." - 2 hours

Goal:

To improve students' knowledge of diseases with a transmissive mechanism of transmission, in which a living vector is required for the transmission of infection, as well as of the etiology, epidemiology, pathogenesis, and clinical manifestations of malaria. To develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts:

Infectious diseases with a transmissive transmission mechanism. Malaria.

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. In order to control the reference level of knowledge the student must know the answers to the questions.
 - What is the causative agent of malaria?
 - What are the epidemiological features of malaria?
 - What is the life cycle of malaria plasmodium?
 - What are the main links of the pathogenesis of malaria?
 - What are the stages of the cyclic clinical course of malaria?
 - What are the main symptoms of malaria in the climax period of the disease?
 - What are the types of temperature curve in malaria?
 - What are the characteristics of tropical malaria?
 - What are the complications of malaria?
 - What methods are used to diagnose malaria?
 - What is the etiotropic therapy of malaria?
 - What is pathogenetic therapy for complications of malaria?
 - What are the methods of malaria prevention?
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- communicate with a malaria patient, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- make a physical examination of a malaria patient and determine the main symptoms of the disease;

- prescribe a complex of laboratory and instrumental studies of a patient with malaria and analyze the results obtained;
- carry out differential diagnosis and substantiate the clinical diagnosis of a malaria patient;
- determine the tactics of providing emergency medical care in case of emergency conditions in a malaria patient;
- create a comprehensive plan for the treatment of a malaria patient based on a preliminary clinical diagnosis, adhering to relevant ethical and legal norms, by making a reasoned decision based on existing algorithms and standard schemes.
- determine malaria prevention measures;
- draw up the medical documentation of a malaria patient.
- make a report on the results of the examination of a patient with malaria by a team of students in a study group, an analysis under the guidance of a teacher of the correctness of establishing a diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

A 52-year-old patient became acutely ill when, after a chill, the body temperature rose to 39.8°C, a headache appeared, and she vomited once. In the following days, despite taking aspirin, a high fever of a constant type persisted, and sleepiness increased. On the 6th day, she fell into an unconscious state. 10 days ago she came from Africa, where she was for 1 month. On examination: T-40.1°C. Unconscious, pronounced psychomotor excitement. Knee reflexes are increased, positive symptoms of Babinsky and Oppenheim. The skin is pale with a lemon tint, cyanosis of the lips. Sclerae are icteric. Pulse 112 in 1 minute, weak filling. Blood pressure - 90/60 mm Hg. Tones of the heart are dull. A significantly enlarged spleen is palpated. The liver is moderately enlarged. In the general blood test, the hemoglobin level is low.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: Malaria. Malarial coma.

Clinical case 2

A 54-year-old patient on the 15th day of her illness complains of a severe headache, nausea, weakness, periodic rises in temperature with subsequent profuse sweating with short-term (less than a day) decreases. She returned from Nigeria two weeks before her illness. On examination: consciousness is unclear, hyperesthesia. Positive meningeal signs, Babinski sign is bilateral positive. Mild icterus of the skin. T 40.1°C, Ps 100, BP 100/65 mm Hg. Heart tones are muffled. Liver +3 cm. Spleen +4 cm. In the general blood analysis, anemia, thrombocytopenia.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: Malaria.

Clinical case 3

A 31-year-old patient developed a sharp chill, T 39.0°C, headache, weakness, heat for 9 hours and suddenly decreased to normal with profuse sweating. A year ago, he returned from South Asia, where he had several attacks of fever, for which he was not examined or treated. The next day he asked for help.

About: T 36.8, pulse 70 beats in 1 min. Abdomen is soft, not painful. Liver +2 cm, spleen +3 cm.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: Malaria. Late relapse.

Clinical case 4

In a patient with a diagnosis of tropical malaria on the 2nd day of quinine treatment hyperthermia, joint and muscle pain, vomiting of bile occurred. The number of erythrocytes decreased to $1 \times 10^{12}/l$, Hb - 30 g/l. Oliguria. Urine color of black beer. When standing urine, 2 layers were formed: the upper one is transparent, the color of red wine, the lower one is dark brown.

1. Make a preliminary diagnosis.
2. Determine the type of complication.
3. Treatment.

Answer: Malaria. Hemoglobinuria fever.

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубовської. К.: ВСВ «Медицина», 2018. –с. 419-440.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 1069-1087.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Practical lesson No. 17

Topic: "Epidemic typhus and Brill's disease" - 2 hours

Goal:

To improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of epidemic typhus and Brill's disease; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts:

Infectious diseases with a transmissive transmission mechanism. Epidemic typhus and Brill's disease

Equipment: illustrative material, tables, thematic patients

Plan:

1. Organizational activities (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. In order to control the reference level of knowledge the student must know the answers to the questions.
 - What is the incidence of epidemic typhus and Brill-Zinsser disease?
 - Name the source of infection in epidemic typhus .
 - What is the mechanism of transmission and vectors for epidemic typhus?
 - What is the pathogenesis of epidemic typhus?
 - Name the periods of epidemic typhus disease.
 - What are the main clinical symptoms of epidemic typhus?
 - What are the features of the temperature curve in epidemic typhus?
 - What are the complications of epidemic typhus?
 - What are the clinical features of Brill-Zinsser disease?
 - What is the specific laboratory diagnosis of epidemic typhus?
 - Principles of etiotropic and pathogenetic therapy of epidemic typhus.
 - Principles of epidemic typhus prevention.
3. Formation of professional skills and abilities (mastering the skills of conducting curation, determining the treatment scheme, prescribe laboratory research, etc.).

Recommendations (instructions) for performing tasks

An applicant of higher education should be able to:

- communicate with a patient with epidemic typhus and Brill's disease, collect complaints, life and disease history, epidemiological history, conduct a survey of organs and systems;
- make a physical examination of a patient with epidemic typhus and Brill's disease
- and determine the main symptoms of the disease;
- to prescribe a complex of laboratory and instrumental studies of a patient with epidemic typhus and Brill's disease and to analyze the obtained results;
- carry out differential diagnosis and substantiate the clinical diagnosis of a patient with epidemic typhus and Brill's disease;
- to determine the tactics of providing emergency medical care in emergency situations in patients with epidemic typhus and Brill's disease;

- to create a comprehensive treatment plan for a patient with epidemic typhus and Brill's disease on the basis of a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- to determine epidemic typhus prevention measures;
- draw up the medical documentation of a patient with epidemic typhus and Brill's disease;
- make a report on the results of the examination of a patient for epidemic typhus and Brill's disease by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the class

Clinical case 1

A 35-year-old patient was hospitalized in an infectious disease hospital in a state of psychomotor agitation. The disease began acutely, with fever up to 39 °C, headache, dizziness, nausea, insomnia. From the first days - euphoria. "Influenza" is diagnosed, symptomatic therapy is ineffective. The patient became excited, brutal. On examination: body temperature 39.5 °C, heart rate 126 bpm, blood pressure 100/70 mm Hg., RD 22 per min. The patient does not want to communicate, expressed negativism. The face is hyperemic, swollen; catarrhal conjunctivitis, roseolous-petechial rash on the chest, lateral surfaces of the trunk, flexion areas of the limbs. Hemorrhagic enanthema on the soft palate. Breathing is harsh, heart sounds are dull, the boundaries are somewhat expanded. Abdomen is soft, does not hurt, hepatosplenomegaly. Hyperacusis, photophobia, deviation of the tongue to the left, dysarthria are observed.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: epidemic typhus

Clinical case 2

A 50-year-old patient was hospitalized on the 6th day after the onset of the disease with a diagnosis of "meningoencephalitis". He became acutely ill, his body temperature rose to 39.2 °C, he suffered from a severe headache, and insomnia appeared. Those around him noticed that the patient became irritable and brutal. On examination: the patient does not orientate in the environment, talkative, mobile. Hyperemia of the face, tremor of the tongue and fingers. On the skin there is an abundant small spotty rash with a predominance of petechiae. Heart rate 128 per minute, pulse arrhythmic, blood pressure 140/65 mm Hg. Over the lower lobe of the lung on the right, weak breathing and moist rales are heard, BR 30 per minute. Abdomen is soft, hepatomegaly. Delayed stools for 2 days.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: epidemic typhus

Clinical case 3

A 20-year-old patient complained of a runny nose and slight sore throat for 3 days. After hypothermia, the condition worsened sharply: chills, body temperature rising to 40°C, headache. A hemorrhagic rash with a cyanotic hue of various sizes and irregular shapes on the skin of the lower limbs, trunk and buttocks. Consciousness is preserved. There are no meningeal signs.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: meningococcal infection, meningococcaemia

Clinical case 5

A 42-year-old patient was hospitalized with complaints of a headache, a rash on the body. During the examination: excited, delirious, the face is hyperemic, the tongue is enlarged, stumbling, petechial rash on the body, limbs, tachycardia, hypotension, hepatosplenomegaly. No permanent place of residence, unemployed.

1. Make a preliminary diagnosis.
2. Plan of laboratory examination.
3. Treatment.

Answer: epidemic typhus

4. Summary:

Assessment of students, summing up, announcement of the next lesson topic.

5. List of recommended literature (main, additional, electronic information resources):

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубоської. К.: ВСВ «Медицина», 2018. –с. 485-496.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 688-698.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, O. Zubach, O. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org–American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

Current evaluation criteria in practical training

Rating	Evaluation criteria
Perfectly "5"	The student is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the topic of the class, demonstrates clinical thinking.
Fine "4"	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic of the class, demonstrates clinical thinking.
Satisfactorily "3"	The acquirer does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
Unsatisfactory "2"	The acquirer does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.